RESPONSE TO PEER REVIEW PANEL TECHNICAL QUESTIONS

Response to Question #4

Available data and research results appear to be sufficient to support the hydrodynamic model calibration and verification analysis, although some salinity results (i.e. at Prim Vista and Midway) could be improved. Model predictions are the issue here. [see previously attached file for details]

Response to Question #8

Additional modeling work can be conducted to quantify temporal and spatial variations of total suspended solids and algal biomass in the North Fork of the St. Lucie Estuary (in a 2-D longitudinal/vertical distribution) using a modeling framework such as CE-QUAL-W2. Essentially, a time-variable water quality model of the estuary can be configured and calibrated to calculate turbidity maxima and chlorophyll *a* levels in the water column instead of using an empirical relationship such as Figure 6.5 (p.6-11), which lacks the capability of addressing the impact of freshwater flow changes on turbidity maxima and algal biomass.